

Pt. 63, Subpt. MMMM, Table 3

40 CFR Ch. I (7–1–09 Edition)

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|----------------------|--|----------------------------|--|
| § 63.10(e) (3) | Excess Emissions/CMS Performance Reports. | No | Section 63.3920 (b) specifies the contents of periodic compliance reports. |
| § 63.10(e) (4) | COMS Data Reports | No | |
| § 63.10(f) | Recordkeeping/Reporting Waiver. | Yes. | Subpart MMMM does not specify requirements for opacity or COMS. |
| § 63.11 | Control Device Requirements/Flares. | No | |
| § 63.12 | State Authority and Delegations | Yes. | |
| § 63.13 | Addresses | Yes. | |
| § 63.14 | Incorporation by Reference | Yes. | |
| § 63.15 | Availability of Information/Confidentiality. | Yes. | Subpart MMMM does not specify use of flares for compliance. |

TABLE 3 TO SUBPART MMMM OF PART 63—DEFAULT ORGANIC HAP MASS FRACTION FOR SOLVENTS AND SOLVENT BLENDS

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

| Solvent/solvent blend | CAS. No. | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|---|------------|-----------------------------------|--------------------------------------|
| 1. Toluene | 108–88–3 | 1.0 | Toluene. |
| 2. Xylene(s) | 1330–20–7 | 1.0 | Xylenes, ethylbenzene. |
| 3. Hexane | 110–54–3 | 0.5 | n-hexane. |
| 4. n-Hexane | 110–54–3 | 1.0 | n-hexane. |
| 5. Ethylbenzene | 100–41–4 | 1.0 | Ethylbenzene. |
| 6. Aliphatic 140 | | 0 | None. |
| 7. Aromatic 100 | | 0.02 | 1% xylene, 1% cumene. |
| 8. Aromatic 150 | | 0.09 | Naphthalene. |
| 9. Aromatic naphtha | 64742–95–6 | 0.02 | 1% xylene, 1% cumene. |
| 10. Aromatic solvent | 64742–94–5 | 0.1 | Naphthalene. |
| 11. Exempt mineral spirits | 8032–32–4 | 0 | None. |
| 12. Ligroines (VM & P) | 8032–32–4 | 0 | None. |
| 13. Lactol spirits | 64742–89–6 | 0.15 | Toluene. |
| 14. Low aromatic white spirit | 64742–82–1 | 0 | None. |
| 15. Mineral spirits | 64742–88–7 | 0.01 | Xylenes. |
| 16. Hydrotreated naphtha | 64742–48–9 | 0 | None. |
| 17. Hydrotreated light distillate | 64742–47–8 | 0.001 | Toluene. |
| 18. Stoddard solvent | 8052–41–3 | 0.01 | Xylenes. |
| 19. Super high-flash naphtha | 64742–95–6 | 0.05 | Xylenes. |
| 20. Varsol® solvent | 8052–49–3 | 0.01 | 0.5% xylenes, 0.5% ethylbenzene. |
| 21. VM & P naphtha | 64742–89–8 | 0.06 | 3% toluene, 3% xylene. |
| 22. Petroleum distillate mixture | 68477–31–6 | 0.08 | 4% naphthalene, 4% biphenyl. |

TABLE 4 TO SUBPART MMMM OF PART 63—DEFAULT ORGANIC HAP MASS FRACTION FOR PETROLEUM SOLVENT GROUPS ^A

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

| Solvent type | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|------------------------|-----------------------------------|---|
| Aliphatic ^b | 0.03 | 1% Xylene, 1% Toluene, and 1% Ethylbenzene. |

| Solvent type | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|-----------------------|-----------------------------------|---|
| Aromatic ^c | 0.06 | 4% Xylene, 1% Toluene, and 1% Ethylbenzene. |

^a Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

^b Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

^c Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

APPENDIX A TO SUBPART MMMM OF PART 63—ALTERNATIVE CAPTURE EFFICIENCY AND DESTRUCTION EFFICIENCY MEASUREMENT AND MONITORING PROCEDURES FOR MAGNET WIRE COATING OPERATIONS

1.0 Introduction.

1.1 These alternative procedures for capture efficiency and destruction efficiency measurement and monitoring are intended principally for newer magnet wire coating machines where the control device is internal and integral to the oven so that it is difficult or infeasible to make gas measurements at the inlet to the control device.

1.2 In newer gas fired magnet wire ovens with thermal control (no catalyst), the burner tube serves as the control device (thermal oxidizer) for the process. The combustion of solvents in the burner tube is the principal source of heat for the oven.

1.3 In newer magnet wire ovens with a catalyst there is either a burner tube (gas fired ovens) or a tube filled with electric heating elements (electric heated oven) before the catalyst. A large portion of the solvent is often oxidized before reaching the catalyst. The combustion of solvents in the tube and across the catalyst is the principal source of heat for the oven. The internal catalyst in these ovens cannot be accessed without disassembly of the oven. This disassembly includes removal of the oven insulation. Oven reassembly often requires the installation of new oven insulation.

1.4 Some older magnet wire ovens have external afterburners. A significant portion of the solvent is oxidized within these ovens as well.

1.5 The alternative procedure for destruction efficiency determines the organic carbon content of the volatiles entering the control device based on the quantity of coating used, the carbon content of the volatile portion of the coating and the efficiency of the capture system. The organic carbon content of the control device outlet (oven exhaust for ovens without an external afterburner) is determined using Method 25 or 25A.

1.6 When it is difficult or infeasible to make gas measurements at the inlet to the control device, measuring capture efficiency

with a gas-to-gas protocol (see §63.3965(d)) which relies on direct measurement of the captured gas stream will also be difficult or infeasible. In these situations, capture efficiency measurement is more appropriately done with a procedure which does not rely on direct measurement of the captured gas stream.

1.7 Magnet wire ovens are relatively small compared to many other coating ovens. The exhaust rate from an oven is low and varies as the coating use rate and solvent loading rate change from job to job. The air balance in magnet wire ovens is critical to product quality. Magnet wire ovens must be operated under negative pressure to avoid smoke and odor in the workplace, and the exhaust rate must be sufficient to prevent over heating within the oven.

1.8 The liquid and gas measurements needed to determine capture efficiency and control device efficiency using these alternative procedures may be made simultaneously.

1.9 Magnet wire facilities may have many (*e.g.*, 20 to 70 or more) individual coating lines each with its own capture and control system. With approval, representative capture efficiency and control device efficiency testing of one magnet wire coating machine out of a group of identical or very similar magnet wire coating machines may be performed rather than testing every individual magnet wire coating machine. The operating parameters must be established for each tested magnet wire coating machine during each capture efficiency test and each control device efficiency test. The operating parameters established for each tested magnet wire coating machine also serve as the operating parameters for untested or very similar magnet wire coating machines represented by a tested magnet wire coating machine.

2.0 Capture Efficiency.

2.1 If the capture system is a permanent total enclosure as described in §63.3965(a), then its capture efficiency may be assumed to be 100 percent.

2.2 If the capture system is not a permanent total enclosure, then capture efficiency must be determined using the liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure in